



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,872	02/28/2007	Cliff Aaby	9501US1 (287846US28PCT)	8680
88095	7590	12/08/2010	EXAMINER	
ARRIS 3871 Lakefield Drive Suwanee, GA 30024			CHOKSHI, PINKAL R	
			ART UNIT	PAPER NUMBER
			2425	
			NOTIFICATION DATE	DELIVERY MODE
			12/08/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mirho@fspllc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,872	<b>Applicant(s)</b> AABY ET AL.	
	<b>Examiner</b> Pinkal R. Chokshi	<b>Art Unit</b> 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 10/21/2010 with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection. See the new rejection below.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,721,829 to Dunn et al (hereafter referenced as Dunn) in view of US Patent 5,790,173 to Strauss et al (hereafter referenced as Strauss).

Regarding **claim 1**, “a content on demand system” reads on the user interface unit that is operable in a VOD mode to order and receive video content programs from head-end (abstract) disclosed by Dunn and represented in Fig. 1.

As to “system comprising: to receive from a set top box a marker obtained from the stream and comprising position data for an audio and/or video stream for which the set top box has paused or suspended viewing” Dunn discloses (col.6, lines 26-27, 39-55) that the STB transmits a pause message, such as a

Art Unit: 2425

pointer, to identify the pause point of the VOD program in the memory location that matches to the juncture of the program when paused to the head-end.

As to “upon a signal from the set top box to resume streaming of the audio and/or video stream from a position proximate to the position data indicated by the marker” Dunn further discloses (col.2, lines 8-18; col.7, lines 9-19) that when viewer changes from the VOD to a regular channel, head-end automatically pauses transmission of VOD program, and resume transmission of VOD program based on the program ID and pause point (pointer) stored the database.

As to “a server adapted to deliver at least one audio and/or video stream and to insert markers in the at least one stream, the markers comprising position data in the at least one stream” Dunn discloses (col.2, lines 4-18 and abstract) that the STB receives video content programs from head-end. However, Dunn does not explicitly teach that the server inserts markers in the stream and markers comprising position data in the stream. Strauss discloses (col.26, line 56-col.27, line 3) that the timestamps of the MPEG stream are used as time/position information marker that is delivered to the STB. Strauss further discloses (col.26, line 56-col.27, line 3) that the timestamp corresponding to the time the program was paused is stored at the STB and used later to resume from the portion of the program starting at the pause marker. Therefore, it would have been obvious to one of the ordinary skills in the art at the time on the invention to modify Dunn's system by using a stream with timestamps/markers already

Art Unit: 2425

presented in the stream as taught by Strauss in order to provide accurate place of pause/resume point of a program.

4. **Claims 3-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7,055,166 to Logan et al (hereafter referenced as Logan) in view of US PG Pub 2008/0022296 to Iggulden (hereafter referenced as Iggulden).

Regarding **claim 3**, “a content on demand system” reads on the storage that takes place at the server system that distributes content on demand to a receiver units (col.8, lines 4-18) disclosed by Logan and represented in Fig. 1.

As to “system adapted to deliver at least one audio and/or video stream and to insert one or more of position, rating, restrictions, or commercial markers” Logan discloses (col.2, lines 56-59; col.8, lines 18-26; col.13, lines 11-30) that the receiver receives marking signal embedded in the broadcast programming signal, where marking signal instructs receiver about the particular portion, such as commercials or pause/FF in VOD program, of the broadcasting programming signal.

Logan meets all the limitations of the claim except “to terminate rendering of the audio and/or video stream when an insufficient number of the markers are detected within a time interval.” However, Iggulden discloses (§0064) that when the second event marker does not occur during the pre-determined time interval, the recording/receiving of the program is discarded as represented in Fig. 5.

Therefore, it would have been obvious to one of the ordinary skills in the art at

Art Unit: 2425

the time of the invention to modify Logan's system by using marker to determine the termination or continuation of rendering of the A/V program as taught by Iggulden in order to charge the user for VOD content based on the amount of time watched.

Regarding **claim 4**, "a set top box" reads on the receiver unit (col.8, lines 4-5) disclosed by Logan and represented in Fig. 1.

As to "STB comprising adapted to scan an audio and/or video stream for one or more of position, rating, restrictions, or commercial markers" Logan discloses (col.11, lines 29-36) that the processor in the receiver scans computer-readable data/programming data to search and generate marking signals. Logan further discloses (col.2, lines 56-59; col.8, lines 18-26; col.13, lines 11-30) that the receiver receives marking signal embedded in the broadcast programming signal, where marking signal instructs receiver about the particular portion, such as commercials or pause/FF in VOD program, of the broadcasting programming signal.

Logan meets all the limitations of the claim except "to terminate rendering of the audio and/or video stream when an insufficient number of the markers are detected within a time interval." However, Iggulden discloses (§0064) that when the second event marker does not occur during the pre-determined time interval, the recording/receiving of the program is discarded as represented in Fig. 5.

Therefore, it would have been obvious to one of the ordinary skills in the art at

Art Unit: 2425

the time of the invention to modify Logan's system by using marker to determine the termination or continuation of rendering of the A/V program as taught by Iggulden in order to charge the user for VOD content based on the amount of time watched.

Regarding **claim 5**, "the set top box wherein at least one marker indicates proximity of an end of the audio and/or video stream" Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning and ending of commercials.

Regarding **claim 6**, "the set top box wherein at least one marker indicates proximity of an advertisement in the audio and/or video stream" Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning of the commercials.

Regarding **claim 7**, "the set top box wherein at least one marker indicates a rating of content of the audio and/or video stream" Logan discloses (col.3, lines 4-17) that the apparatus receives marking signal that indicates the rating of the program segment.

Regarding **claim 8**, "the set top box further adapted to inhibit at least one of fast forward, rewind, pausing, skipping, or playing of the audio and/or video

Art Unit: 2425

stream” Logan discloses (col.13, lines 11-30) that the marking signal includes a blocking signal (restricting condition) that prevents user from skipping predefined segment/commercial (subsection of the stream) of the broadcast programming signal.

5. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn in view of Strauss as applied to claim 1 above, and further in view of US Patent 6,115,057 to Kwoh et al (hereafter referenced as Kwoh).

Regarding **claim 2**, combination of Dunn and Strauss meets all the limitations of the claim except “the content on demand system of claim 1, the server further adapted to deliver at least one audio and/or video stream and to insert markers in the at least one stream, the markers indicating a rating of content of the stream proximate to a position of the marker.” However, Kwoh discloses (col.17, lines 32-45) that the television system delivers video stream and insert a rating data at the beginning to mark the beginning of a rated video segment and at the end of a video segment to mark the end of the video segment or embed the rating data in the VBI to mark the video segment for control viewing of the rated video segment as represented in Figs. 23, 24, and 26. Therefore, it would have been obvious to one of the ordinary skills in the art at the time on the invention to modify Dunn and Strauss's systems by using a stream with markers indicating rating of the content as taught by Kwoh in order to either continue or block the program streaming based on the rating marker.

6. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Iggulden as applied to claim 4 above, and further in view of Kwoh.

Regarding **claim 9**, combination of Logan and Iggulden meets all the limitations of the claim except “the set top box adapted to inhibit at least one of viewing or listening of the audio and/or video stream when the rating is mature content.” However, Kwoh discloses (col.16, lines 54-61) that when R rating start data is detected, the receiver blocks the R rated video segment for the television screen. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Logan and Iggulden's systems by blocking R/Mature rated content from viewing as taught by Kwoh in order to provide parental control which prevents the children from viewing the unsuitable content (col.1, lines 54-56).

7. **Claims 11-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Iggulden as applied to claim 4 above, and further in view of US PG Pub 2003/0188316 to DePrez (hereafter referenced as DePrez).

Regarding **claim 11**, combination of Logan and Iggulden meets all the limitations of the claim except “the set top box adapted to enable rendering and/or navigation of the audio and/or video stream when a marker indicating an end to a restricting condition is encountered in the audio and/or video stream.” However, DePrez discloses (¶0203) that the process for verifying authorized

Art Unit: 2425

playback of a program where a timer used to prevent excessive viewing while waiting for a response on authorization. If timer expires while waiting for continued viewing to be authorized, then it causes viewing of the program to stop. DePrez further discloses (§0204) that the user is directed to watch the original program after authorized program timer's stop. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Logan and Iggulden's systems by starting to deliver a/v stream when marker is detected as taught by DePrez so the viewing of regular programming can be continued.

Regarding **claim 12**, "the set top box wherein the restricting condition further comprises: proximity of an end of the audio and/or video stream" Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning and ending of commercials.

Regarding **claim 13**, "the set top box wherein the restricting condition further comprises: proximity of an advertisement in the audio and/or video stream" Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning of the commercials.

Regarding **claim 14**, “the set top box wherein the restricting condition further comprises: a rating of content of the audio and/or video stream” Logan discloses (col.3, lines 4-17) that the apparatus receives marking signal that indicates the rating of the program segment.

Regarding **claim 15**, “the set top box claim 11 further adapted to enable at least one of fast forward, rewind, pausing, skipping, or playing of the audio and/or video stream” Logan discloses (col.13, lines 11-30) that the marking signal includes a blocking signal (restricting condition) that prevents user from skipping predefined segment/commercial (subsection of the stream) of the broadcast programming signal.

8. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Iggulden and DePrez as applied to claim 11-15 above, and further in view of Kwoh.

Regarding **claim 16**, combination of Logan, Iggulden and DePrez meets all the limitations of the claim except “the set top box of claim 11 further adapted to enable at least one of viewing or listening of the audio and/or video stream when the rating is no longer mature content.” However, Kwoh discloses (col.16, lines 54-61) that when R rating start data is detected, the receiver blocks the R rated video segment for the television screen. When R rating end data is detected, the display of G rated video continues. Therefore, it would have been

Art Unit: 2425

obvious to one of the ordinary skills in the art at the time of the invention to modify Logan, Iggulden and DePrez's systems by blocking R/Mature rated content from viewing as taught by Kwoh in order to provide parental control which prevents the children from viewing the unsuitable content (col.1, lines 54-56).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US PG Pub 2002/0131511 to Zenoni

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pinkal R. Chokshi whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2425

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pinkal R. Chokshi/  
Examiner, Art Unit 2425

/Brian T Pendleton/  
Supervisory Patent Examiner, Art Unit 2425